NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY AND INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

Big R Plating & Polishing, Inc. 1925 Massachusetts Avenue Indianapolis, Indiana 46202

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 097-17807-00504	
Issued by: Original Signed by John B. Chavez	Issuance Date: September 16, 2003
John B. Chavez, Administrator Indianapolis Office of Environmental Services	Expiration Date: September 16, 2008

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emissions Units and Pollution Control Equipment Summary

B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]
- B.6 Modification to Permit [326 IAC 2]
- B.7 Minor Source Operating Permit [326 IAC 2-6.1]
- B.8 Phase Construction Time Phrame
- B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]
- B.10 Preventive Maintenance Plan [326 IAC 1-6-3]
- B.11 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]
- B.13 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- B.14 Annual Fee Payment [326 IAC 2-1.1-7]

C SOURCE OPERATION CONDITIONS

- C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less than One Hundred (100) Pounds per Hour [40 CFR 52, Subpart P] [326 IAC 6-3-2]
- C.2 Permit Revocation [326 IAC 2-1-9]
- C.3 Opacity [326 IAC 5-1]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]
- C.6 Performance Testing [326 IAC 3-6]
- C.7 Compliance Requirements [326 IAC 2-1.1-11]
- C.8 Compliance Monitoring [326 IAC 2-1.1-11]
- C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
- C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]
- C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements

- C.12 Malfunctions Report [326 IAC 1-6-2]
- C.13 General Record Keeping Requirements [326 IAC 2-6.1-2-5]
- C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

D.1 EMISSIONS UNIT OPERATION CONDITIONS: Chromium Electroplating Tank DC-1

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

- D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
- D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]
- D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]
- D.1.4 Work Practice Standards [40 CFR 63.342(f)]
- D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]
- D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.7 Performance Testing Requirements [326 IAC 2-1.1-11] [40 CFR 63.343(b)(1)] [40 CFR 63.343(b)(2)] [40 CFR 63.344]

D.1.8 Establishing Site-Specific Operating Parameter Values [40 CFR 63.343(c)] [40CFR 63.344(d)]

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343(c)] [326 IAC 20-8-1]

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

- D.1.10 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [40 CFR 63.346]
- D.1.11 Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [40 CFR 63.344(a), 63.345 and 63.347]

D.2 EMISSIONS UNIT OPERATION CONDITIONS: Shot Blasting

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.2.2 Testing Requirements [326 IAC 2-1.1-11]

Chromium Electroplating and Anodizing NESHAP Ongoing Compliance Status Report

Malfunction Report

Annual Notification
Affidavit of Construction

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary decorative chromium electroplating operation.

Authorized Individual: Rufus Barger, owner

Source Address: 1925 Massachusetts Avenue, Indianapolis, Indiana, 46202

Mailing Address: 6612 Sargent Road, Indianapolis, IN 46256

Phone Number: (317) 353-1250

SIC Code: 3471 County Location: Marion

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD Rules

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) decorative chromium electroplating operation consisting of one (1) decorative chromium electroplating tank, identified as DC-1, using a hexavalent chromium bath with maximum rectifier capacity of 1,500 amps and a maximum cumulative rectifier capacity of 8,820,000 amp-hours, with wetting agent CR1700 fume suppressant as chromium control;
- (b) one (1) shot blast operation with an internal nozzle diameter of 1/4 inches, using a fabric filter as particulate control, with a maximum sand flow rate of 675.0 pounds per hour, identified as Shot Blast #1.

SECTION B

GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Indianapolis Office of Environmental Services (OES), Air Permits Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to OES.
 - (2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6 and 326 IAC 2-2 or 326 IAC 2-3 and an Operation Permit Validation Letter is issued.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 Phase Construction Time Frame

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM and Indianapolis Office of Environmental Services (OES) may revoke this permit to construct if the:

(a) Construction of One (1) decorative chromium electroplating operation and One (1) shot blast operation has not begun within eighteen (18) months from the effective date of this permit or if during the construction work is suspended for a continuous period of one (1) year or more.

The OAQ may extend such time upon satisfactory showing that an extension, formally requested by the Permittee is justified.

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the IDEM, Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The first annual notification shall cover the time period from the issuance date of this permit to December 31 of the year in which the permit is issued, subsequent annual notifications shall cover the time period from January 1 to December 31 of the previous year in the format attached to:

Compliance Branch, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015,

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

The annual notifications shall be submitted no later than 30 days after the end of the previous year.

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis. Indiana 46221

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indianapolis Office of Environmental Services Air Permits 2700 South Belmont Avenue Indianapolis, Indiana 46221

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, OES, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.13 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to 326 IAC 2-6.1-6(d)(3):

- (a) In the event that ownership of this source is changed, the Permittee shall notify OES within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, and OES shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.14 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG

Page 9 of 29 MSOP 097-17807-00504

(b) The Permittee may call the following telephone number: 317-327-2234, to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]
 - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of

regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the OAQ Administrator at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC
14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are
applicable for any removal or disturbance of RACM greater than three (3) linear feet on
pipes or three (3) square feet on any other facility components or a total of at least 0.75
cubic feet on all facility components.

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(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
thoroughly inspect the affected portion of the facility for the presence of asbestos. The
requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61,
Subpart M, is federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ and OES.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify the IDEM, OAQ and OES of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and OES no later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ and OES, if the source submits to IDEM, OAQ and OES a reasonable written explanation no later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already

legally required shall be implemented immediately after the permit issuance.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11]

- (a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading unless otherwise specified in this permit.
- (b) Whenever a condition in this permit requires the measurement of a temperature or hoist speed, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading unless otherwise specified in this permit.
- (c) The Permittee may request the IDEM, OAQ and OES approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and OES, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ and OES that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ and OES reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the IDEM, OAQ and OES or appointed representative upon request.

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ and OES using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 General Record Keeping Requirements [326 IAC 2-6.1-2-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the IDEM Commissioner and/or OES Administrator make a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner and/or Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) Unless otherwise specified in this permit, any report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG

Page 15 of 29 MSOP 097-17807-00504

calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) decorative chromium electroplating operation consisting of one (1) decorative chromium tank, identified as DC-1, using a hexavalent chromium bath with maximum rectifier capacity of 1,500 amps and a maximum cumulative rectifier capacity of 8,820,000 amp-hours, with wetting agent CR1700 fume suppressant as chromium control.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.

D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N] The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to the Tank DC-1. A copy of this rule is attached.

D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the Tank DC-1 by using a chemical fume suppressant containing a wetting agent and not allowing the surface tension of the electroplating baths contained within the tank to exceed forty-five (45) dynes per centimeter (dynes/cm) [equivalent to three and on-tenths times ten raised to the power of negative three pound-force per foot (3.1 x 10⁻³ lb_r/ft0] at any time during operation of the Tank DC-1 when a chemical fume suppressant containing a wetting agent is used.
- (c) An alternative emission limit of 0.01 milligram per dry standard cubic meter (mg/ dscm) will be applicable if the chromium electroplating bath does not meet the limit above.

D.1.4 Work Practice Standards [40 CFR 63.342(f)] [326 IAC 20-8-1]

The following work practice standards apply to the Tank DC-1:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the Tank DC-1, including the wetting agent fume suppressant and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, and OES which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ and OES may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAQ and OES finds that the plan:
 - (1) Does not address a malfunction or period of excess emissions that has occurred;
 - (2) Does not provide adequate procedures for correcting malfunctioning Tank DC-1 with wetting agent fume suppressant, monitoring equipment or other causes of excess emissions as quickly as practicable.

For the Tank DC-1, the Permittee shall comply with the requirements of this condition on and after the start-up date.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Condition B.7 Preventive Maintenance Plan of this permit, is required for the Tank DC-1.

D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the Tank DC-1. The OMP shall specify the operation and maintenance criteria for the Tank DC-1, wetting agent fume suppressant, and monitoring equipment, and shall include the following elements:
 - (1) Manufacturer's recommendations for maintenance of the monitoring equipment used to measure surface tension;
 - (2) A standardized checklist to document the operation and maintenance criteria for the Tank DC-1, the wetting agent fume suppressant, and the monitoring equipment.
 - (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.
 - (4) A systematic procedure for identifying malfunctions and periods of excess emissions of the Tank DC-1, wetting agent fume suppressant and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining the

Tank DC-1, the wetting agent fume suppressant, and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.

- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ, and OES.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ, and OES for the life of the Tank DC-1 or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAQ, and OES for a period of five (5) years after each revision to the plan.

Compliance Determination Requirements [326 IAC 2-1.1-11]

- D.1.7 Performance Testing [326 IAC 2-1.1-11] [40 CFR 63.343(b)(1)] [40 CFR 63.343(b)(2)] [40 CFR 63.344]
 - (a) The Permittee is not required to conduct the initial performance test for the Tank BC-1by this permit. However, the IDEM, OAQ, and OES may require testing when necessary to determine if the tank is in compliance. If testing is required by the IDEM, OAQ, and OES, compliance with the limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.
 - (b) Any change, modification, or reconstruction of the Tank DC-1, the wetting agent fume suppressant, or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C.6 - Performance Testing.
- D.1.8 Establishing Site-Specific Operating Parameter Values [40 CFR 63.343(c)] [40 CFR 63.344(d)] In lieu of establishing the maximum surface tension during a performance test, the Permittee shall accept 45 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation. The Permittee is exempt from conducting a performance test only if the criteria of 40 CFR 63.343(b)(2) are met.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

- D.1.9 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-5.1-3(3)(2)] [326 IAC 2-6.1-5(a)(2)]
 - (a) Pursuant to 40 CFR 63.343(c)(5)(ii) and (iii), when using a wetting agent in the electroplating bath to comply with the limit specified in Condition D.1.3, the Permittee shall monitor the surface tension of the electroplating bath. Operation of the Tank DC-1 at a surface tension greater than 45 dynes per centimeter shall constitute noncompliance with the standards.
 - (1) The Permittee shall monitor the surface tension of the electroplating bath during tank operation according to the following schedule:
 - (A) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of this part.

- (B) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation.
- (C) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (B) above. For example, if a Permittee had been monitoring a tank once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation.
- (2) Once a bath solution is drained from the Tank DC-1 and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (B) and (C) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank and the rectifier is turned on. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts may be considered operating time.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.10 Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)] [40 CFR 63.346]

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6. These records shall be maintained in accordance with Section C.14 - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the wetting agent fume suppressant and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.7 and D.1.9 have taken place. The record can take the form of a checklist and should identify the following:
 - The device inspected;
 - (2) The date of inspection;
 - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
 - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.

- (b) Records of all maintenance performed on the Tank DC-1 and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of the Tank DC-1, the wetting agent and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of the Tank DC-1, the wetting agent and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.9(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressants added.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.10.

D.1.11 Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [40 CFR 63.344(a), 63.345 and 63.347]

The notifications and reports required in this section shall be submitted to IDEM, OAQ and OES using the address specified in Section C.15 - General Reporting Requirements.

- (a) Notifications:
 - (1) Initial Notifications
 The Permittee shall submit an Initial Notification for each new or reconstructed tank as follows:
 - (A) A notification of the actual date when construction of the tank DC-1 commenced shall be submitted no later than thirty (30) days after such date.
 - (B) A notification of the actual date of startup of the tank DC-1 shall be The NCS shall be submitted no later than thirty (30) days after such date.
 - (2) Notification of Performance Test
 The Permittee shall notify IDEM, OAQ, and OES in writing of their intention to conduct a performance test at least sixty (60) days before the test is scheduled to begin.
 - (A) Pursuant to Section C Performance Testing, a test protocol shall be

submitted no later than thirty-five (35) days prior to the intended test date.

- (B) In the event the Permittee is unable to conduct the performance test as scheduled, pursuant to 40 CFR 63.7(b)(2) the Permittee shall notify IDEM, OAQ, and OES within five (5) days prior to the scheduled performance test date and specify the date when the performance test is rescheduled. Pursuant to Section C Performance Testing, the rescheduled performance test date shall be no sooner than fourteen (14) days after IDEM, OAQ, and OES are notified in writing of the need to reschedule.
- (3) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
 - (A) The NCS for the Tank BC-1 shall be submitted to IDEM, OAQ, and OES, and shall list the information identified in 40 CFR 63.347(e)(2).
 - (B) The NCS for the Tank BC-1 shall be submitted to IDEM, OAQ, and OES no later than 30 days after the startup date.
- (4) Notification of Construction or Reconstruction
 Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank
 subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR
 63.344(e)) without submitting a Notification of Construction or Reconstruction
 (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or
 reconstruct the tank DC-1 without submitting a Notification of Construction or
 Reconstruction (NCR) to IDEM, OAQ, and OES.
 - (A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).
 - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device
 - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct the tank DC-1serves as this notification.
 - (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ, and OES before construction, modification, or reconstruction may commence.
- (b) Performance Test Results

The Permittee shall document results from any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report
The Permittee shall prepare summary reports to document the ongoing compliance status

of the Tank DC-1 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because the Tank DC-1 is located at a site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be prepared as provided in paragraph (c)(1), retained on site and made available to IDEM, OAQ and OES upon request.

- (1) The Ongoing Compliance Status Report shall be completed according to the following schedule except as provided in paragraphs (c)(2).
 - (A) The first report shall cover the period from the issuance date of their permit to December 31 of the year in which the permit is issued, and shall be completed no later than 30 days after the end of a reporting period.
 - (B) Following the first year of reporting, the report shall be prepared on a calendar year basis with the reporting period covering from January 1 to December 31, and shall be completed no later than 30 days after the end of a reporting period.
- (2) In accordance with 40 CFR 63.347(h)(2), Semiannual Ongoing Compliance Status Reports shall be prepared and submitted to IDEM, OAQ and OES if either of the following conditions are met:
 - (A) the total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.9(b) for the reporting period, or:
 - (B) the total duration of malfunctions of monitoring equipment is 5 percent (5%) or greater of the total operating time.

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(h)(3) is approved.

(3) IDEM, OAQ and OES may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

Section D.2

Emission Unit Operation Condition

Emissions Unit Description:

(b) One (1) shot blast operation with an internal nozzle diameter of 1/4 inches, using a fabric filter as particulate control, with a maximum sand flow rate of 675.0 pounds per hour, identified as Shot Blast #1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-3-2 (e)]

(a) Pursuant to 326 IAC 6-3-2 (e) (Particulate Matter Emission Limitations), the PM emissions from the Shot Blast #1 shall not exceed the emission rate of 3.15 pounds per hour, based on a maximum process weight of 675 pounds of sand per hour.

Interpolation and extrapolation of the data for process weight up to sixty thousand pounds per hour shall be accomplished by use of the equation:

 $E=4.10 \times P^{0.67}$ where E= rate of emission pounds per hour; and P= process weight in tons per hour.

(b) The Fabric Filter shall be in operation at all times when the Shot Blast #1 is in operation.

Compliance Determination Requirements

D.2.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM, OAQ and/or OES may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM or OES, compliance with the particulate limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C.8 Performance Testing.

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

and

INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES AIR COMPLIANCE

MINOR SOURCE OPERATING PERMIT CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

Source Name: Big R Plating & Polishing, Inc.

Source Address: 1925 Massachusetts Avenue, Indianapolis, IN 46202

Mailing Address: 6612 Sargent Road, Indianapolis, IN 46256

MSOP No.: 097-17807-00504

Tank ID #: Tank DC-1
Type of process: Decorative

Monitoring Parameter: Surface tension of the electroplating bath

Parameter Value: 45 dynes per centimeter

Limits: Total chromium concentration may not exceed 0.01 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating NESHAP only. The frequency for completing this report may be altered by IDEM, OAQ Compliance Branch.

Companies classified as an area source:

Complete this report no later than 30 days after the end of the reporting

period, and retain on site unless otherwise notified.

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:

TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:

MAJOR AND AREA SOURCES: CHECK ONE

- 9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
- 9 THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:

IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.

JAN	APR	JUL	ОСТ
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

DECORATIVE CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:

LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

	•	,	
JAN	APR	JUL	ОСТ
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

Page 2 of 2

CHECK IF EITHER OR BOTH CONDITIONS WERE MET DURING THE REPORTING PERIOD:

- the total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.(9)(b) for the reporting period, or:
- the total duration of malfunctions of add-on pollution control device and monitoring equipment is 5 percent (5%) or greater of the total operating time as defined in Condition D.1.(9)(b) for the reporting period.

ATTACI	A SEPARATE PAGE IF NEEDED Page	e 2 of 2
CHEC	IF EITHER OR BOTH CONDITIONS WERE MET DURING THE REPORTING PERIOD:	
9	the total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordar with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.9(b) the reporting period, or:	
9	the total duration of malfunctions of monitoring equipment is 5 percent (5%) or greater of the total operating time.	
FOLI	OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NO DWED, PROVIDE AN EXPLANATION OF THE REASONS FOR NOT FOLLOWING THE PIESCRIBE THE ACTIONS TAKEN FOR THAT EVENT:	
	RIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETO THE LAST STATUS REPORT:	<u>C.</u>
ADD	IONAL COMMENTS:	
ALL:	DURCES: CHECK ONE	
<u>9</u>	I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATIC CONTAINED IN THIS REPORT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.	<u>N</u>
9	THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDANCE WITH OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHED.	<u>THE</u>
<u>Submi</u>	ed by: Date:	
Title/P	sition:	
<u>Signat</u>	<u></u>	
Phone	Attack a signal and Cooks to the U.	
	Attach a signed certification to complete this report	

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER: 317-233-5967

INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES AIR COMPLIANCE FAX NUMBER: 317-327-2274

PAGE 1 OF 2

MALFUNCTION REPORT

	d to report malfunctions applicable for the exemption under 326 IAC	
THIS FACILITY MEETS THE APPLICABILITY RECPARTICULATE MATTER?, 25 TONS/YEAR AS TONS/YEAR HY?, 25 TONS/YEAR HY?, 25 TONS/YEAR REDUCED SULFUR CO CARBON MONOXIDE?, 10 TONS/YEAR AS COMBINATION HAZARDOUS AIR POLLUTANT? ELEMENTAL LEAD?, OR IS A SOURCE LISMALFUNCTIONING CONTROL EQUIPMENT OR APPLICABLE LIMITATION	SULFUR DIOXIDE ?, 25 DROGEN SULFIDE ?, 25 MPOUNDS ?, 25 TONS/Y NY SINGLE HAZARDOUS AIR P , 1 TON/YEAR LEAD OR I STED UNDER 326 IAC 2-5.1-3(2	TONS/YEAR NITROGEN OXIDES?, TONS/YEAR TOTAL REDUCED SULFUR EAR FLUORIDES ?, 100TONS/YEAR OLLUTANT ?, 25 TONS/YEAR ANY LEAD COMPOUNDS MEASURED AS EXTRACTOR STORM
THIS MALFUNCTION RESULTED IN A VIOLATIO PERMIT LIMIT OF	N OF: 326 IAC OR, PE	RMIT CONDITION # AND/OR
THIS INCIDENT MEETS THE DEFINITION OF 'MA	ALFUNCTION' AS LISTED ON R	REVERSE SIDE ? Y N
THIS MALFUNCTION IS OR WILL BE LONGER T	. ,	
COMPANY:_ LOCATION: (CITY AND COUNTY)	P	HONE NO. ()
LOCATION: (CITY AND COUNTY)_ PERMIT NOAFS PLANT ID:	AEC DOIN	T.ID. INCD.
FERIVITINO. AFS FLANTID.	SS DEVICE WHICH MALFUNC	I ID. INSF.
REASON:		TIONED AND
DATE/TIME MALFUNCTION STARTED:/ ESTIMATED HOURS OF	OPERATION WITH MALFUNC	
DATE/TIME CONTROL EQUIPMENT BACK-IN SE	RVICE// 20	AM/PM
TYPE OF POLLUTANTS EMITTED: TSP, PM-	10, SO2, VOC, OTHER:	
ESTIMATED AMOUNT OF POLLUTANT EMITTE	ED DURING MALFUNCTION:	
MEASURES TAKEN TO MINIMIZE EMISSIONS:		
REASONS WHY FACILI' CONTINUED OPERATION REQUIRED TO PRO CONTINUED OPERATION NECESSARY TO PRO CONTINUED OPERATION NECESSARY TO PRO INTERIM CONTROL MEASURES: (IF APPLICABLE)	REVENT INJURY TO PERSONS: REVENT SEVERE DAMAGE TO	
MALFUNCTION REPORTED BY:	(SIGNATURE IF FAXED)	_TITLE:
MALFUNCTION RECORDED BY:	(SIGNATURE IF FAXED) DATE:	TIME:

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*Essential services are interpreted to mean those operations, such as, the providing of electricity by
power plants. Continued operation solely for the economic benefit of the owner or operator shall no be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.
If this item is checked on the front, please explain rationale:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

AND

INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES AIR COMPLIANCE

MINOR SOURCE OPERATING PERMIT

ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

	1 7	
Company Name:	Name: Big R Plating & Polishing, Inc.	
Address:	1925 Massachusetts Avenue	
City:	Indianapolis	
Phone #:	(317) 353-1250	
MSOP#:	097-17807-00504	

I hereby certify that Big R Plating & Polishing is

- 9 still in operation.
- 9 no longer in operation.

I hereby certify that Big R Plating & Polishing, Inc. is

- **9** in compliance with the requirements of MSOP 097-17807-00504.
- 9 not in compliance with the requirements of MSOP 097-17807-00504.

Authorized Individual (typed):	
Title:	
Signature	
Date:	

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:		

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG

Page 29 of 29 MSOP 097-17807-00504

Mail to: Indianapolis Office of Environmental Services Air Permits

2700 South Belmont Avenue Indianapolis, Indiana 46221-2097

Big R Plating & Polishing, Inc. 1925 Massachusetts Avenue Indianapolis, Indiana 46202

Affidavit of Construction

l,		ing duly swe	orn upon m	ly oath, depose and say	y:	
	of the Authorized Representative) I live in	(County Indi	iana and baing of coun	d mind and over twen	aty one (21)
1.	I live in years of age, I am competent to give			iana and being of south	u minu and over twen	ty-one (21)
2.	I hold the position of		for			
2.	(Title		101	(Company Name)		
3.	By virtue of my position with			, I have personal k	knowledge of the repr	esantation
	contained in this affidavit and am autl Big R Plating and Polishing, Inc.	(Compan horized to m	-	representations on beh	alf of	
4.	I hereby certify that Big R Plating and has constructed one (1) decorative electroplating chromium tank, ide rectifier capacity of 1,500 amps a with a wetting agent CR1700 fum internal nozzle diameter of 1/4 in 675.0 pounds per hour, identified construction permit application re 2003 and as permitted pursuant (MSOP) No. 097-17807-00504, F	e chromium entified as I and a maxin ne suppres- ches, using I as Shot B eceived by to New So	electropla DC-1, using mum cum sant as co g a fabric last #1, in the Indian urce Con	ating operation consing a hexavalent chroulative rectifier caparentrols, and one (1) Sifilter as controls, with conformity with the apolis Office of Environstruction and Mino	isting of one (1) decomium bath with ma city of 8,820,000 are Shot Blast operation tha maximum sand requirements and in conmental Services	corative eximum mp-hours, n with an I flow rate of ntent of the on June 5, g Permit
5.	Additional (operations/facilities ?) were document and were not made in accordoes not apply.)					is
Further Affiant s	aid not.					
I affirm under p	enalties of perjury that the representations	s contained	in this affid	avit are true, to the bes	st of my information a	nd belief.
		Signatur	e			
		Date				
STATE OF INDI	ANA))SS	Date				
COUNTY OF _)					
Subsc	cribed and sworn to me, a notary public in	and for		Co	ounty and State of Indi	iana on this _
	day of	, 20				
My Commission	expires:					
			Signature			_
			-			_
			Name (ty	yped or printed)		

Indiana Department of Environmental Management Office of Air Quality

and

Environmental Resources Management Division

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name: Big R Plating & Polishing, Inc.

Source Location: 1925 Massachusetts Avenue, Indianapolis, IN 46202

County: Marion SIC Code: 3471

Operation Permit No.: 097-17807-00504 Permit Reviewer: Boris Gorlin

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed an application from Big R Plating & Polishing, Inc., relating to the construction and operation of a decorative chromium electroplating and shot blast process.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process. The source is planned to be constructed (relocated from its current location - 3525 E. Washington Street, Indianapolis, IN 46201) and start operation in the third quarter of 2003, after obtaining a proper permitting approval. The source will consist of equipment relocated from the currently permitted facility (source ID 097-00352, MSOP 097-12534-00352, issued on March 17, 2003).

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following new emission units and pollution control devices:

- (a) One (1) decorative chromium electroplating operation consisting of one (1) decorative electroplating chromium tank, identified as DC-1, using a hexavalent chromium bath with maximum rectifier capacity of 1,500 amps and a maximum cumulative rectifier capacity of 8,820,000 amp-hours, with a wetting agent CR1700 fume suppressant as controls;
- (b) one (1) Shot Blast operation with an internal nozzle diameter of 1/4 inches, using a fabric filter as controls, with a maximum sand flow rate of 675.0 pounds per hour, identified as Shot Blast #1.

New Emission Units and Pollution Control Equipment

There are no new facilities proposed at this source during this review process.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
N/A	N/A	N/A	N/A	N/A	N/A

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Administrator that the construction and operation be approved, pursuant to 326 IAC 2-5.1-4 (Transition Procedures). This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 5, 2003.

Emission Calculations

Chromium emissions (Single HAP) from the biggest chromium electroplating source in Indiana are less than ten (10) tons per year and Big R Plating & Polishing, Inc. is a much smaller source in comparison. Therefore, no emission calculations were necessary for the chromium electroplating because the chromium emissions from this source will be less than ten (10) tons per year. See Appendix A (one page) of this document for detailed emissions calculations for the Shot Blast #1.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	79.8
PM-10	38.4
SO ₂	0.0
VOC	0.0
CO	0.0
NO _x	0.0

HAP's	Potential To Emit (tons/year)
Chromium	Less than 10

This new source is subject to the provisions of Minor Source Operating Permit Program 326 IAC 2-6.1-3(a) because it meets the applicability criteria under 326 IAC 2-5.1-3(a)(2) as a chrome electroplating source, and under 326 IAC 2-5.1-3(a)(1)(E) as a source with potential to emit more than 25 tons per year of PM.

Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status	
PM-10	attainment	
SO ₂	attainment	
NO ₂	attainment	
Ozone	attainment	
СО	attainment	
Lead	attainment	

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Marion County has been classified as attainment or unclassifiable for PM10, SO₂, NOx, and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)	
PM	0.798	
PM10	0.384	
SO ₂	0.0	
VOC	0.0	
CO	0.0	
NO _x	0.0	
Chromium	N/A	

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This source is not subject to the Part 70 Permit requirements because:

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of each criteria air pollutant is less than 100 tons per year;

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPS is less than twenty-five (25) tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:
 - (1) The surface tension of the chromium electroplating bath contained with the tank shall not exceed forty-five (45) dynes per centimeter at any time during the operation of the tank if a chemical fume suppressant containing a wetting agent is used to demonstrate compliance.
 - (2) Each time that surface tension monitoring exceeds forty-five (45) dynes per centimeter, the frequency of monitoring must revert back to every four (4) hours of tank operation. After forty (40) hours of monitoring tank operation every four (4) hours with no exceedances, surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there have been no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis, until an exceedance occurs.
 - (3) An alternative emission limit of 0.01 milligram per dry standard cubic meter (mg/dscm) will be applicable if the chromium electroplating bath does not meet the limit above.
 - (4) A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. This report shall be completed annually, retained on site, and made available to IDEM, OAQ and OES upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347 (h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management Air Compliance Branch, Office of Air Quality Chromium Electroplating 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206

and

Indianapolis Office of Environmental Services Air Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

(5) The chromium electroplating operations shall be subject to the record keeping

and reporting requirement as indicated in the chromium electroplating NESHAP.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Marion County and the potential to emit VOC and NO_x , is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

This source is located in Marion County. Therefore, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-2(2).
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 1-6-3 (Preventive Maintenance Plan)

A Preventive Maintenance Plan (PMP) is required for the tank DC-1.

326 IAC 6-1 (Nonattainment Area Limitations)

Pursuant to 326 IAC 6-1-1, this source is not subject to the requirements of 326 IAC 6-1 because it is not mentioned in 326 IAC 6-1-8.1 through 6-1-18 and the source does not have potential PM emissions of one hundred (100) tons per year or more or actual PM emissions of ten (10) tons per year or more.

326 IAC 6-3-2 Particulate Matter Limitation (PM)

Pursuant to 326 IAC 6-3-2 (e) (Particulate Matter Emission Limitations), the PM emissions from the Shot Blast #1 shall not exceed the emission rate of 3.15 pounds per hour, based on a maximum process weight of 675 pounds of sand per hour.

Interpolation and extrapolation of the data for process weight up to sixty thousand pounds per hour shall be accomplished by use of the equation:

E= 4.10 x P^{0.67} where E= rate of emission pounds per hour; and P= process weight in tons per hour.

The Fabric Filter shall be in operation at all times when the Shot Blast #1 is in operation.

326 IAC 20-1-1 (Incorporation of federal regulations)

The chromium electroplating operation, subject to 326 IAC 20-8, is required to comply with the requirements of 40 CFR 63, Subpart A, concerning general provisions for emission standards for hazardous air pollutants.

Big R Plating & Polishing, Inc. Indianapolis, Indiana Permit Reviewer: BG Page 6 of 6 MSOP097-17807-00504

326 IAC 20-8 (Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks)

The chromium electroplating operation is required to comply with the requirements of 40 CFR 63, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Electroplating and Anodizing Tanks as described in the "Federal Rule Applicability" section of this TSD.

Conclusion

The operation of this decorative chrome electroplating and shot blast process shall be subject to the conditions of the attached proposed Minor Source Operating Permit 097-17807-00504.

Appendix A: Emission Calculations Abrasive Blasting

Page 1 of 1 TSD App A

Company Name: Big R Plating & Polishing, Inc.

Address: 1925 Massachusetts Avenue, Indpls., IN 46202

Permit #: MSOP 097-17807-00504

Plt ID: 097-00504 Reviewer: Boris Gorlin

Emission Factors for Abrasives (AP-42, Table 13.2.6-1)

http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s02-6.pdf)

Table 1	Emission Factor, lb/1,000 lb abrasive		
Abrasive	PM	PM10	
Sand	27.0	13.0	

PM emission factor (lb PM/ lb abrasive) for Sand from Table 1 =

PM10 emission factor (lb PM10/ lb abrasive) for Sand from Table 1 =

FR = abrasive Flow Rate (lb/hr) =

N = number of nozzles =

0.027
0.013
675.0
 1

Uncontrolled PM Emissions =

18.2 lb/hr 79.8 ton/yr

Uncontrolled PM 10 Emissions =

8.8 lb/hr 38.4 ton/yr

Controlled Emissions (based on an estimated 99 % fabric filter efficiency, air flow 8,700 acfm, and 8760 hr/yr):

A 1		D	—		
Contro	IIea	РΜ	Emis	ssions	, ;

0.182 lb/hr	0.002 gr/dscf
0.798 ton/yr	

Controlled PM 10 Emissions =

0.088 lb/hr	0.001	gr/dscf
0.384 ton/yr		

Process Weight Calculation [326 IAC 6-3-2(e)]

E (lb/hr) = $4.10 \times P^{0.67}$ (ton/hr) = $4.10 \times 0.6750^{0.67}$ = **3.15 lb/hr**

 $E (ton/yr) = 3.15 (lb/hr) \times 8,760 (hr) / 2,000 (lb/ton) (ton/hr) = 13.80 ton/yr$

Notes:

Emission, ton/yr = lb/hr X 8760 hr/yr X 1 ton/2000 lbs